fix: add validation for SAML SLO redirect URLs #38994

Merged julio-rocketchat merged 9 commits into `develop` from `saml-redirect-validation`

2 weeks ago

yasnagat commented on Feb 24 • edited by coderabbitai bot

Member

Proposed changes (including videos or screenshots)

The SAML Single Logout (SLO) redirect functionality was vulnerable to open redirect attacks. Users could be redirected to arbitrary external URLs by manipulating the redirect query parameter, potentially leading to phishing attacks or credential theft.
This happened because the processSLORedirectAction function directly used the user-supplied redirect parameter without validation, allowing attackers to craft malicious URLs like:
`/_saml/sloRedirect/saml-test/?redirect=https://malicious-site.com`

This PR:

- Validates redirect URLs against the configured IDP Single Logout Service endpoint;
- Implements origin and pathname matching to ensure redirects only go to the configured IDP.

Issue(s)

VLN-153, VLN-165

Steps to test or reproduce

N/A

Further comments

N/A

Summary by CodeRabbit

- **Bug Fixes**
  - Strengthened SAML Single Logout (SLO) redirect validation to block malformed or unauthorized redirect URLs.
  - Added strict presence, format and URL parsing checks for redirect parameters with clear error responses (400/403/500) for invalid input.
  - Enforced origin and normalized path matching between configured IdP SLO and requested redirect; redirects now use the validated URL.
- **Chores**
  - Added a changeset documenting the SAML redirect validation patch.

 `fix: add validation for SAML SLO redirect URLs` ✕ `f574d8c`

dionisio-bot bot commented on Feb 24 • edited Contributor

Looks like this PR is ready to merge! 🎉
If you have any trouble, please check the PR guidelines

changeset-bot bot commented on Feb 24 • edited

🦋 Changeset detected

Latest commit: `6b923a5`

The changes in this PR will be included in the next version bump.

▶ This PR includes changesets to release 41 packages

Not sure what this means? Click here to learn what changesets are.

Click here if you're a maintainer who wants to add another changeset to this PR

coderabbitai bot commented on Feb 24 • edited Contributor

> Note

Reviews paused

It looks like this branch is under active development. To avoid overwhelming you with review comments due to an influx of new commits, CodeRabbit has automatically paused this review. You can configure this behavior by changing the `reviews.auto_review.auto_pause_after_reviewed_commits` setting.

Use the following commands to manage reviews:

- `@coderabbitai resume` to resume automatic reviews.
- `@coderabbitai review` to trigger a single review.

Use the checkboxes below for quick actions:

- [ ] ▶️ Resume reviews
- [ ] 🔍 Trigger review

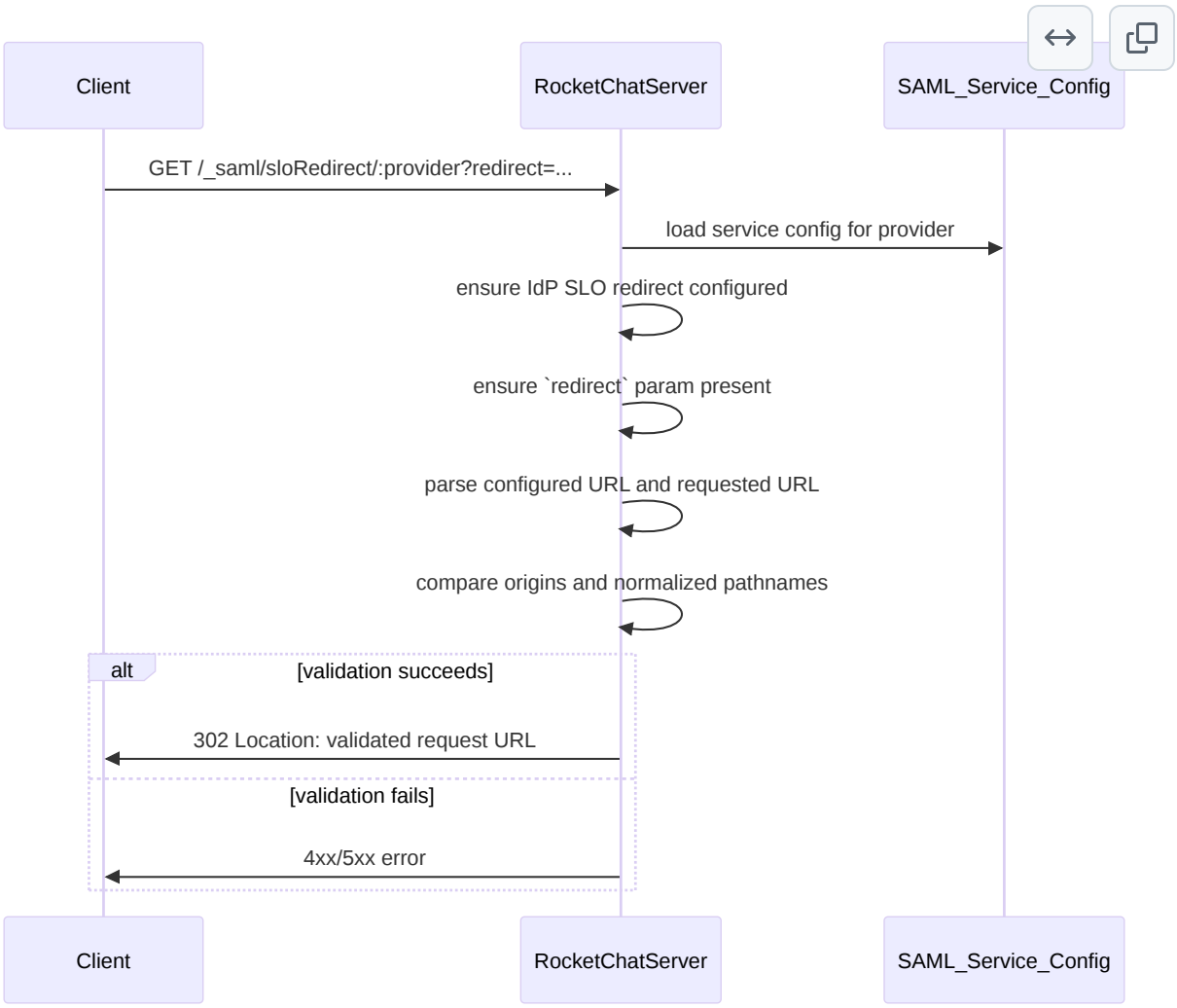
Walkthrough

SAML SLO redirect handling now requires the SAML service, validates the configured IdP SLO URL and the user-provided `redirect` parameter, parses both URLs, enforces origin and normalized pathname equality, and redirects to the validated request URL or returns 4xx/5xx on failure.

Changes

Cohort / File(s)	Summary
SAML SLO Redirect Validation `apps/meteor/app/meteor-accounts-saml/server/lib/SAML.ts`	`processSLORedirectAction` signature updated to accept `service`. Added checks: require configured IdP SLO redirect (500), require user `redirect` param (400), parse/validate both URLs (400 on parse failure), enforce origin match and normalized pathname equality (403 on mismatch), and set `Location` to the validated request URL.
Changeset `.changeset/metal-rice-retire.md`	Adds a changeset entry documenting the SAML redirect validation change (patch).

Sequence Diagram(s)



Estimated code review effort

🎯 3 (Moderate) | ⏱️ ~20 minutes

Suggested labels

`type: bug`

▶ 🚥 Pre-merge checks | ✅ 5

▶ 📝 Coding Plan

Thanks for using CodeRabbit! It's free for OSS, and your support helps us grow. If you like it, consider giving us a shout-out.

▶ ❤️ Share

Comment `@coderabbitai help` to get the list of available commands and usage tips.

> Tip
>
> ▶ CodeRabbit can approve the review once all CodeRabbit's comments are resolved.

coderabbitai bot reviewed on Feb 24

View reviewed changes

coderabbitai bot left a comment — Contributor

Actionable comments posted: 3

▶ 🤖 Prompt for all review comments with AI agents

▶ ℹ️ Review info

▶ 📜 Review details

`apps/meteor/app/meteor-accounts-saml/server/lib/SAML.ts` Show resolved

`apps/meteor/app/meteor-accounts-saml/server/lib/SAML.ts` Show resolved

`apps/meteor/app/meteor-accounts-saml/server/lib/SAML.ts` Outdated Show resolved

codecov bot commented on Feb 24 • edited

Codecov Report

✅ All modified and coverable lines are covered by tests.
✅ Project coverage is 70.49%. Comparing base (`8b32bc9`) to head (`6b923a5`).
⚠️ Report is 25 commits behind head on develop.

▶ Additional details and impacted files

▶ 🚀 New features to boost your workflow:

yasnagat added 2 commits 2 months ago

`Normalize path comparison for redirect validation` ✕ `fd4998d`

`Merge branch 'develop' into saml-redirect-validation` ✕ `8411cf9`

ggazzo added the area: authentication label on Feb 27

yasnagat marked this pull request as ready for review last month

coderabbitai bot added type: bug and removed area: authentication labels on Mar 2

coderabbitai bot reviewed on Mar 2

View reviewed changes

coderabbitai bot left a comment — Contributor

▶ ♻️ Duplicate comments (2)

▶ 🤖 Prompt for all review comments with AI agents

▶ ℹ️ Review info

▶ 📜 Review details

cubic-dev-ai bot reviewed on Mar 2

View reviewed changes

cubic-dev-ai bot left a comment — Contributor

1 issue found across 1 file

▶ Prompt for AI agents (unresolved issues)

Reply with feedback, questions, or to request a fix. Tag `@cubic-dev-ai` to re-run a review.

`apps/meteor/app/meteor-accounts-saml/server/lib/SAML.ts` Show resolved

pierre-lehnen-rc requested changes on Mar 2

View reviewed changes

`apps/meteor/app/meteor-accounts-saml/server/lib/SAML.ts` Outdated Show resolved

`Update apps/meteor/app/meteor-accounts-saml/server/lib/SAML.ts` ··· ✕ `6843866`

coderabbitai bot added area: authentication and removed type: bug labels on Mar 3

coderabbitai bot reviewed on Mar 3

View reviewed changes

coderabbitai bot left a comment — Contributor

Actionable comments posted: 1

▶ 🤖 Prompt for all review comments with AI agents

▶ ℹ️ Review info

▶ 📜 Review details

`apps/meteor/app/meteor-accounts-saml/server/lib/SAML.ts` Show resolved

KevLehman requested changes on Mar 3

View reviewed changes

KevLehman left a comment — Member

pls add a changeset

`add changeset file` — ✕ `568e6c3`

coderabbitai bot added type: bug and removed area: authentication labels on Mar 4

pierre-lehnen-rc previously approved these changes on Mar 5

View reviewed changes

pierre-lehnen-rc left a comment — Contributor

Not sure but maybe we should redirect to home in case of error, as the client is not expecting this redirect to ever fail and won't be able to recover from it (though there should also not be any errors on normal usage)

👍 1

KevLehman previously approved these changes on Mar 5

View reviewed changes

yasnagat added this to the **8.3.0** milestone on Mar 5

julio-rocketchat reviewed last month

View reviewed changes

`apps/meteor/app/meteor-accounts-saml/server/lib/SAML.ts` Outdated — Show resolved

`Merge branch 'develop' into saml-redirect-validation` — ✕ `0e154f3`

coderabbitai bot added area: authentication and removed type: bug labels 3 weeks ago

`Update apps/meteor/app/meteor-accounts-saml/server/lib/SAML.ts` ✗ `3346067`

julio-rocketchat dismissed stale reviews from **KevLehman** and **pierre-lehnen-rc** via `3346067` 3 weeks ago

`Merge branch 'develop' into saml-redirect-validation` ✓ `7dd041a`

julio-rocketchat approved these changes 3 weeks ago

View reviewed changes

julio-rocketchat added the stat: QA assured label 3 weeks ago

dionisio-bot bot added the stat: ready to merge label 3 weeks ago

dionisio-bot bot enabled auto-merge 3 weeks ago

coderabbitai bot added type: bug and removed area: authentication labels 3 weeks ago

dionisio-bot bot added this pull request to the merge queue 3 weeks ago

github-merge-queue bot removed this pull request from the merge queue due to failed status checks 3 weeks ago View details

`Merge branch 'develop' into saml-redirect-validation` ✓ `6b923a5`

dionisio-bot bot enabled auto-merge 3 weeks ago

dionisio-bot bot added this pull request to the merge queue 3 weeks ago

KevLehman approved these changes 3 weeks ago

View reviewed changes

github-merge-queue bot removed this pull request from the merge queue due to failed status checks 3 weeks ago View details

julio-rocketchat added this pull request to the merge queue 2 weeks ago

julio-rocketchat modified the milestones: **8.3.0**, **8.4.0** 2 weeks ago

Merged via the queue into `develop` with commit **d12b53c** 2 weeks ago View details

46 checks passed

julio-rocketchat deleted the `saml-redirect-validation` branch 2 weeks ago

Reviewers

- **coderabbitai[bot]**
- **cubic-dev-ai[bot]**
- **KevLehman** ✓
- **julio-rocketchat** ✓
- **pierre-lehnen-rc**

Assignees

No one assigned

Labels

stat: QA assured | stat: ready to merge | type: bug

Projects

None yet

Milestone

8.4.0

Development

Successfully merging this pull request may close these issues.

None yet

5 participants